

Annual Atlases of Global Monthly Oceanic Data for 1987-1994

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The data information and management challenge associated with global change research activities is not only to archive and make data available for individual research activities, but also to be able to combine data from several disciplines and disparate sources. This paper describes an established method for providing the oceanographic and meteorological communities with long-term, calibrated satellite-derived data sets for studies of the role of the ocean in global climate change. Seven volumes of a series of annual atlases of global monthly mean distributions of surface oceanographic variables have been produced from space-based observations for the years 1987 to 1993. The time interval is noteworthy because it encompassed two moderate El Niño episodes and a strong La Niño event, which will be described. While the 1994 atlas has not yet been published, data associated with 1994 will be included. Different spacecraft and sensors were used to create the long time series, and the methods employed to create **intercalibrated** data sets are described. Two variables, surface wind speed and sea surface temperature, extend for eight years; other variables, such as surface wind velocity and sea surface height, have shorter record lengths. Sampling distributions will be described, including interesting characteristics associated with sea surface temperature data processing that contributed to the establishment of the Sea Surface Temperature Pathfinder Data Set. Changes made to the atlas series as a result of advice received from a survey of users, and future plans for the atlas series, will be described.